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A COMPARISON OF HANDICAPPED COLLEGE STUDENTS AND COLLEGE STUDENTS IN GENERAL.

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This study attempted to gain a better understanding of handicapped students in college. The basic purposes of the study were: (1) to find out how well handicapped students compare, gradewise, with the general population of college students, and (2) to report these findings in order that rehabilitation counselors might profit from additional knowledge about handicapped college students. The data were secured from two sources: (1) final computations made by computer used by the administration at the University of Georgia, and (2) official grades issued by the university. The results show that the rehabilitation counselor does an excellent job of screening handicapped students. The handicapped students were higher in grade point average than college students in general. However, female college students in general had a grade point average higher than the handicapped females. Recommendations for further study are made. (Author/PS)

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A COMPARISON OF HANDICAPPED
COLLEGE STUDENTS AND COLLEGE
STUDENTS IN GENERAL

By
George D. Purdy

A 921 Research Project
Submitted to Dr. Thomas L. Porter
in Partial Fulfillment of the Requirements of
Master of Education Degree in
Vocational Rehabilitation Counseling

Athens
The University of Georgia

March, 1967

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PREFACE

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G. D. P.

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CHAPTER I

INTRODUCTION

Each year the Georgia Division of Vocational Rehabilitation sponsors handicapped students in college. These students must of course be accepted by the colleges they attend, hence each student must satisfy the requirements of the specific school that he attends. The Vocational Rehabilitation students are subjected to a further evaluation. The Rehabilitation Counselor handling each handicapped individual's case secures not only the admission scores required by the college, but he obtains additional test data, a family and personal history, and through personal interviews attempts to assess motivation.

Often psychological reports are obtained from professional psychologists to accompany an extensive medical evaluation. This entire set of data is used in making the decision as to whether or not the student can and will succeed in the college setting. Frequently, this decision is the product of the team approach (i.e. rehabilitation counselor, psychologist, school counselor, etc.).

It appears that rehabilitation students (all are handicapped) would make at least satisfactory grades and there should be less incidence of drop-outs among this group than in the ordinary population of college students. There has been some question by rehabilitation counselors as to whether or not this statement is true, since a number of handicapped students in college make poor grades and drop-outs are frequent. This has

become an increasing concern within the entire Division of Vocational Rehabilitation. Since there has been a paucity of research, it seems that a study should be made to distinguish some definite solutions to the problem.

PROBLEM

Statement of the Problem

The purpose of this study is to answer the question, "How well do handicapped students compare in academic average with college students in general?" A considerable amount of time, effort, and money is spent on the prospective handicapped college student. It would be an economical move to determine if these students fare as well academically as the student who is not subjected to this exhaustive procedure.

Hypotheses

In order to evaluate the problem and give definite solutions, several hypotheses arise:

1. There is no significant difference between the grade point average of handicapped college students and college students in general.
2. There is no significant difference between the grade point average of female handicapped college students and female college students in general.
3. There is no significant difference between the grade point average of male handicapped college students and male college students in general.

Importance of the Study

Prior to the enrollment of a handicapped person in college, the rehabilitation counselor spends a considerable amount of time and money on the prospective student in order to determine if the individual is college material. Presently, there is no direct evidence to support whether or not this lengthy and expensive evaluation is necessary or if it presents a significantly better student in college. If the handicapped students show a better over-all grade point average, it is conceivable that this evaluation is valuable and should be continued, but if these students do not measure up to at least the minimum school requirements, some alteration should be made in the evaluation process.

Definition of Terms

The following terms are defined as they are used within this study:

Academic success - the extent to which a student achieves in school

Average grade - the mean grade point average

College students in general - any person enrolled in an institution of higher learning

College success - the extent to which a student achieves in college

Drop-out - a student who permanently withdraws from school

Evaluation - a series of test data, personal history, and medical diagnosis used to assess an individual's ability to succeed in college

G.P.A. - grade point average

Handicap - a mental or physical condition that is a deviation from the normal body

Handicapped student - an individual enrolled in college who has a physical or mental impairment

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Rehabilitation counselor - a professional person who is employed by the Division of Vocational Rehabilitation

Rehabilitation student - a student who is going to school and is being sponsored by the Division of Vocational Rehabilitation

Student - an individual who is pursuing a course of study in a school

Limitations of the Study

This study was made only with students who were freshmen at the University of Georgia during the 1965-1966 school year. A true picture of the comparison of handicapped students with general college students was obtained for this specific school year. Inference to other schools and to other school years is limited and could not be adequately done without additional research.

The University of Georgia keeps no record of drop-outs. The only people who are accounted for are the students who fill out withdrawal forms or those who are dismissed. Any number of students appear to be drop-outs but only leave school for one or two quarters and then return. This lack of information prohibits the accumulation of adequate data and consequently dictates that no research can be done concerning drop-outs in this study.

Previous research has clearly shown that college success depends upon many factors. This study was limited to only academic success in the form of grade point average. No claim was made that this study completely tells how students perform in college, only an attempt to explain one segment of college success.

There were only thirty two handicapped students at the University of Georgia during the period covered by this study. Since this is a limited number compared with over two thousand freshmen, some question may be raised as to the authenticity of this report.

Vocational Rehabilitation sponsors college students who have been referred or have applied to the agency for assistance. It is intuitively evident that there were students who had definite handicaps who were considered in the general population in this report. Even though this situation existed, there was no way to distinguish the entire handicapped group except by interview and this was impractical.

There has been little research done relating the college success of handicapped students with ordinary college students. While this has not hampered this study, it has presented a problem in finding related literature. It seems that this paucity of research should have been avoided since the problem is of such a wide-spread and economical situation with rehabilitation services all over the country. The reports and studies that were found lack precision and proper controls. The trend of the data is sufficiently consistent to suggest that the conclusions reached have some degree of validity. One of the major needs in this area is for more adequate surveys and control studies of disabled college students. As increasing numbers of disabled students enter the colleges and universities, and as additional research funds become available for studies of this type, further data should be forthcoming (Rusalew, 1962).

CHAPTER II

SURVEY OF RELATED LITERATURE

Research directed toward finding out how and why students achieve in school has uncovered numerous answers. It seems that the way in which a student performs in school is not only due to his native intelligence or to his level of learning ability, but is due also to how his native intelligence is interacted with all the environmental factors which have surrounded him. All of the basic skills he has learned affect his subsequent achievement (Burr, 1959). When the student enters college, it seems that additional facts enter the student's life which to some degree dictate what academic success he will achieve in college. Included in these extra demands set forth by college is what degrees are offered by the college, its location, its experience (whether it is public or private), and its extent (whether it offers two years, four years, or graduate work, i.e. the highest degree for preparation it offers) (Hill, 1965).

In college, students' interests often interpret an indication of the level of the students' aspiration, drive and motivation (Crites, 1963). Many times the interests lead the students in different paths. Some continue to persist in college and complete the work going to an even further degree while other students drop out. The students who drop out of college are significantly more hostile than the students who persist in college work. In addition, drop-out students show considerably more

maladjustment; have little interest in literature or in philosophy; are illogical, irrational, uncritical in their approach in problem solving; and dislike reflective and abstract power (Rose, 1966).

Interests of students who persist in college tend to change with time and experience. Often this change in interests causes a variation in grades from one semester to another. It seems that immaturity in terms of need for autonomy would be one explanation for the frequently observed phenomena of extreme variation in the academic achievement from semester to semester even among very capable students (Rose, 1966). The patterns of vocational interest revealed by handicapped students on a group basis has not been markedly different from those of student populations in general, although vocations such as physical therapist or vocational rehabilitation counselors seem to be more prominent since these students have considerable contact with these particular vocations (St. Andrews Presbyterian College Demonstration Study, 1966).

Each year thousands of physically handicapped students apply for admission to American colleges and universities. Their exact number has not been determined. A sampling of a few large institutions suggests that this special college population runs into the tens of thousands. Some have mild limitations which will have only minor influence on their college programs. Others are severely disabled, with limitations which affect many aspects of college attendance. Still others have limitations so pervasive that personnel in the institutions question the desirability of enrolling them.

The trend in college attendance of physically handicapped students can be measured only by the crudest of yardsticks. Yet college administrators tend to believe that their numbers and the severity of their disabilities are on the increase. Colleges and universities are and will continue to be confronted by the need to serve individuals with a variety of disabilities. Most common among these are limitations in vision, hearing, mobility, manipulative ability, physical vigor, and endurance.

Physically disabled students attend college for much the same reasons as other students. The patterns of motivation are individual and varied. The dominant interest may be self-realization, an affection for learning, status, parental pressure, vocational plans, the expectations for growth in a particular social class, the influence of a key person, improvement in social level, or other factors (Rusalew, 1962).

A 1950 study of 453 colleges and universities serving physically handicapped veterans of World War II found that the institutions tended to have favorable attitudes toward these students. The most common forms of special assistance provided were transportation facilities (special parking privileges, elevators, and ramps), housing arrangements (special dormitory facilities and preference in referral to private boarding houses near campus), classroom adjustments (special scheduling of classes, waiving of some prerequisites, substitutions of equivalent courses, and use of special equipment in the classroom), and student personnel and counseling programs. Most disabled college students adapt to the college environment and with the exception of a small minority, these students had academic, financial, and personal problems not dissimilar

from those of other students (Rusalem, 1962).

A North Carolina Study disclosed that handicapped students show satisfactory academic progress in keeping with past records of performance before and during college. No specific deficiencies or weaknesses came to life, however it must be recognized that physically handicapped students cannot adequately participate in physical education classes. Health class lectures are necessitated in lieu of the activity type course (St. Andrews Presbyterian College Research and Demonstration Study, 1966). College level academic work requires such basic physical faculties as ability to see, to hear, to manipulate, to ambulate, to speak, to write, to perceive and to respond appropriately. To illustrate, participation in a college laboratory course in chemistry requires ability to use arms, shoulders, hands and fingers to manipulate apparatus and substances safely and effectively. A course in art appreciation demands minimum levels of visual acuity. The number of examples could be extended manifold. The essential fact is that each curriculum area should be analyzed realistically in terms of the requirements which it makes on students (Rusalem, 1962).

Both handicapped and non-handicapped students, in order to be well motivated and therefore productive, must have a sense of security, a sense of success (achievement and recognition), and a sense of belonging. The broadest and most basic need is for security. These are perhaps the most basic factors a person must possess in order to accomplish any mission in life (Stahl, 1962).

SUMMARY

Various data indicate that the academic success of a college student depends on several factors, the first of which is innate intelligence or the level of learning ability. Also included are environmental factors, basic skills, previous achievements, the availability of colleges and programs within these colleges, and interest. It seems that the handicapped students are at a disadvantage only from the standpoint of participation in personal care with the exception of some specific disabilities such as blindness or extreme hard of hearing. Ordinarily, the handicapped student persists as well and makes grades comparable with those of the ordinary student. The only great difficulty observed with the handicapped student so far as academic success is concerned, is the usual activity type physical education class which must be altered for the physically handicapped. A student who is enrolling in college whether he be handicapped or not must make realistic and satisfying decisions. Students planning for classes and careers must temper themselves by judgement and common sense and consider emotional judgement, physical and social maturity, health, etc. (Burr, 1959).

CHAPTER III

PROCEDURES

Group I: The entire freshman class at the University of Georgia during the 1965-1966 school year. This group varied in number from quarter to quarter due to students who dropped out of school, those who returned after an absence and transfer students from other schools. The exact number of subjects was: Fall quarter 2,702, Winter quarter 2,757, and Spring quarter 2,665.

This group was selected for three basic reasons: (1) Since the University of Georgia was the largest and most diversified school in the state, it should have the most varied and representative group of students in this area, (2) Since this researcher was attending the University of Georgia at that time, the availability of data was adequate and sufficient for the proposed study, (3) Since the University of Georgia provided the funds for this study, some obligation was felt to this institution.

Group II: Students at the University of Georgia who were freshmen during the 1965-1966 school year and who were sponsored by the Georgia Division of Vocational Rehabilitation. These students of necessity to be sponsored by Vocational Rehabilitation were handicapped. It is fully realized that all handicapped students were not known to Vocational Rehabilitation but there was no way to find every handicapped individual enrolled at the University except through personal interviews which was impractical.

The members of the handicapped group were also included in the student population as described for Group I. This could have possibly contaminated the sample but since the ratio $\frac{32}{2665}$ was relatively small the resultant difference would be negligible.

This group was chosen because (1) it represented the largest group of handicapped students in the state who were competing against general college students, (2) data concerning these students was readily available and (3) these students probably represented as many different disabilities as any student group that could be found on a college campus. The number of handicapped students was constant all three quarters at thirty-two.

Data Gathering Methods

The admissions office at the University of Georgia was very helpful in supplying data concerning the entire student population. The various data were secured from computer reports in the Admission's Office. Much sifting through voluminous material was necessary in order to locate information pertinent to this study.

The data required for the handicapped group was secured from the Athens Office of Vocational Rehabilitation. A record of all rehabilitation students and their grades is kept there. It was a simple, though lengthy, matter to abstract the needed information.

Analysis of Data

The grade point average was calculated on the basis of: A+ - 98, A - $94\frac{3}{4}$, B+ - 88, B - $84\frac{3}{4}$, C+ - 78, C - $74\frac{3}{4}$, D+ - 68, D - $64\frac{3}{4}$, and F - $64\frac{3}{4}$.

The grade received in each course was translated into its numerical value.

This number was multiplied by the number of hours earned in the course. The total of the points for all courses was thus divided by the number of quarter hours attempted to obtain the grade point average.

The G.P.A. of college students in general was prepared by the computer in the administration building at the University of Georgia. These averages were computed for the entire student population in terms of (1) the cumulative average of all freshmen by quarters and by school, (2) the cumulative average of male students for the year, by school, and (3) the cumulative average of female students for the year by school.

The G.P.A. of handicapped college students was obtained from raw grades (i.e. A, B, or C) that were sent by the university to the Athens Office of Vocational Rehabilitation. The averages were computed in exactly the same manner as is described above with college students with the exception of the use of the computer. These data were computed manually with the aid of a Burroughs calculator. By observation and selection, these averages were then placed into the same groups as the college students in general (i.e. cumulative average by quarter and school, cumulative average of female students by year and school, and cumulative average of male students by year and school).

Tables were arranged so as to compare both groups by (1) school and quarter, (2) school and female students, and (3) school and male students. The range, median, standard deviation, and mean were computed for each table. The medians and ranges were compared by inspection only while the means were compared by use of z scores and t scores as described by Spiegel, 1961.

CHAPTER IV

FINDINGS

This chapter is concerned with the findings that the compared groups presented. The data are based on the permanent records of students at the University of Georgia and official grades issued by this school.

The data was arranged to coincide with the hypotheses so it would yield concrete solutions so far as this study is concerned.

Tables 1, 2, and 3 are direct expressions of hypothesis I. Table 1 shows the relationship of the grade point average for the Fall quarter by schools. All students (both general college students and handicapped students) are represented.

A question here arises - Why compare the G.P.A.'s by school average and not compare the G.P.A.'s of individual students? The answer lies in the availability of data. The computer at the University of Georgia gives only data that it's program asked for, with nothing else. The programmers in this case failed to provide for the standard deviation and hence it was not calculated by the computer.

Since there are more than 2,000 students represented by this study, it would be a monumental task to manually figure this standard deviation. Even so, when the two groups are compared via the averages of the schools, a perfectly correct correlation is secured that is probably as adequate as any other method.

A comparison of the G.P.A.'s for the year would show a representative correlation and would have been adequate for this study but since the data was available, comparisons were made for the cumulative averages for each of the three quarters.

Table 1 shows the relationship of the G.P.A.'s of the two groups by schools for the Fall quarter. It gives one of the solutions to the truth or falsity of hypothesis I.

- (1) There is no significant difference between the grade point average of handicapped college students and college students in general.

TABLE I

A Comparative Analysis of the G.P.A. of College Students in General and Handicapped College Students at the University of Georgia, by School, Fall Quarter, 1965.

School	Fall Quarter Mean of General College Students	Number	Fall Quarter Mean of Handicapped Students	Number
Arts and Sciences	78.0	1613	80.1	23
Business	74.6	378	80.0	4
Journalism	79.1	111	*	
Agriculture	74.7	106	*	
Education	78.0	363	75.7	3
Home Economics	79.6	92	*	
Forestry	76.7	39	79.9	2
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Median	78.0		79.95	
Mean	77.5		79.7	
Number	2702		32	
Range	5.0		4.4	
S. D.	1.39		1.27	

* No handicapped students enrolled in this school

Standard Deviation of Difference .23

Mean Difference 2.2

Critical Ratio or z score 9.56

The results obtained from this table give several indications that the handicapped students as a whole made grades superior to the general college students. By inspection of the G.P.A.'s of the individual schools, it is seen that the handicapped students were higher in every case with the exception of Education. The median of the handicapped group was found to be 1.95 points higher. The range of the handicapped students' grades was lower by .6 points which indicates that there was less fluctuation in this group than in the grades of the general college students.

Since the hypothesis is written in the form of a null hypothesis, it is necessarily assumed that the respective means of the two groups are equal. The statistics then must be used to prove this assumption true or false and therefore accept or reject the hypothesis.

The standard deviations of the two groups are $S. D._1 = 1.39$ (general college students) and $S. D._2 = 1.27$ (handicapped students). The standard deviation of the difference in the means is then .23. The mean difference is 2.2 in favor of the handicapped students. In order to find the significance of this difference, the z score was found (9.56). Since this is clearly a difference in favor of the handicapped students the one-tailed test was adequate. The critical value of z for a one-tailed test is 2.88 to have a level of significance to .002. Since the determined z score for the groups concerned in this study was 9.56, it is clearly evident that this is far beyond the acceptable range and hence the hypothesis must be rejected with a level of certainty

beyond .002. Further, since the mean difference is clearly in favor of the handicapped group, it can now be stated that there is a significant difference between the G.P.A.'s of the two groups and there are only two chances in 1,000 that this could happen due to chance. Hence, it is determined that the handicapped students made significantly higher grades than did the general college students.

cannot state

TABLE II

A Comparative Analysis of the Cumulative G.P.A. of College Students in General and Handicapped College Students at the University of Georgia, Winter Quarter, 1966.

School	Winter Quarter Mean of General College Students	Number	Winter Quarter Mean of Handicapped Students	Number
Arts and Sciences	76.9	1619	79.9	23
Business	74.1	401	78.6	4
Journalism	77.1	119	*	
Agriculture	74.1	124	*	
Education	76.5	365	75.8	3
Home Economics	79.6	88	*	
Forestry	74.8	41	77.9	2
<hr/>				
Median	76.5		78.25	
Mean	76.4		79.20	
Number	2757		32	
Range	5.5		4.1	
S. D.	1.24		1.26	

* No handicapped students enrolled in this school

Standard Deviation of Difference .22

Mean Difference 2.8

Critical Ratio or z score 12.72

Table II is simply a continuation of the proof of hypothesis 1. It presents data on the same groups as Table I and compares them in exactly the same way. The only difference between the two tables (Table I and Table II) is that Table II compares general college students and handicapped students for the Winter quarter instead of the Fall quarter.

Table II presents a striking similarity to the data in Table I. The median for the handicapped group is again higher, this time by 1.75. The range of the general college students is larger by 1.4, indicating less stability in this group than in the handicapped population.

The mean difference is ($M_1 - M_2 = 79.2 - 76.4$) 2.8, in favor of the handicapped students. Is this a significant difference, and does it support the null hypothesis? Since both groups have more than thirty members, both must be considered normal and hence closely approximate the bell curve. A z score indicates the deviation from the assumed equal means of the two groups. This was found to be 12.72. The critical value for z in order to be certain 998 times in 1,000 on the one-tailed test is 2.88. Hence, it is determined that there is a significant difference in the G.P.A.'s of the two groups with the handicapped students being higher. Consequently, the null hypothesis must be rejected and it must be concluded that the handicapped students made significantly higher grades than did the general college students.

Cannot State ?

TABLE III

A Comparative Analysis of the Cumulative G.P.A. of College Students in General and Handicapped College Students at the University of Georgia, Spring Quarter, 1966.

School	Spring Quarter Mean of General College Students	Number	Spring Quarter Mean of Handicapped Students	Number
Arts and Sciences	77.3	1522	80.0	23
Business	74.6	411	79.9	4
Journalism	76.3	126	*	
Agriculture	73.9	120	*	
Education	77.2	355	77.1	3
Home Economics	79.1	92	*	
Forestry	74.2	39	77.4	2
Median	76.3		78.65	
Mean	76.7		79.6	
Number	2665		32	
Range	5.2		2.9	
S. D.	1.26		1.007	

* No handicapped students enrolled in this school

Standard Deviation of Difference	.18
Mean Difference	2.9
Critical Ratio or z score	16.11

Table III is again equated to satisfy hypothesis 1. It compares the cumulative G.P.A. of each school for the entire 1965-1966 school year. Since it does compare the handicapped group with the general college population for the year, this is probably the most realistic picture of the three quarters presented. Tables I and II only gave comparisons for parts of the year and so it is conceivable that the yearly averages are a more nearly accurate arrangement of the known data.

There appear several factors in this table, as with the two previous tables, that the grades of the handicapped students are higher. The median is 2.35 higher and the range is 2.3 lower giving clear indications that the general college group had a lower overall average and were less stable.

The mean of handicapped students is 2.9 points higher than the general college students. The standard error of difference is .18. Since the number of students in each group is in excess of thirty, both can be considered normal distributions. Following the null hypothesis, the means are assured equal and then proven to be such or not. The z score yields a critical ratio of 16.11 and since the one-tailed level of significance requires 2.88 for certainty to the .002 level, it can be stated that there is a significant difference between the means. Hence, it is determined that the handicapped students made a significantly higher G.P.A. than did the general college students, so hypothesis I must be rejected.

Cannot say higher

TABLE IV

A Comparative Analysis of the G.P.A. of Female College Students in
General and Handicapped Female Students at the University of Georgia,
1965-1966 School Year.

School	Mean of General College Female Students	Number	Mean of Handicapped College Female Students	Number
Arts and Sciences	78.4	713	77.6	3
Business	76.8	49	71.8	1
Journalism	78.6	68	*	
Agriculture	73.9	16	*	
Education	77.5	310	78.1	2
Home Economics	79.1	92	*	
<hr/>				
Median	77.45		77.6	
Mean	78.1		76.8	
Number	1248		6	
Range	5.2		6.3	
S. D.	.72		2.2	

* No handicapped students enrolled in this school

Standard Deviation of Difference	.72
Mean Difference	1.3
t score	4.33

Hypothesis 2: There is no significant difference between the grade point average of female handicapped college students and female college students in general.

Table IV is an expression of this statement in an attempt to prove or disapprove the hypothesis. Table IV compares the G.P.A.'s of female handicapped students with female college students in general by school for the 1965-1966 school year.

The median of the handicapped females was slightly higher (.15) than the general college females but the handicapped group showed more variability since the range is 1.1 higher for this group.

The total population of handicapped girls was only six, so in order to find the significance in the difference between the means a "Student's" distribution was necessitated. The mean difference was 1.3 and the standard error of difference was .72. The "Student's" t was found to be 4.33. This is beyond 2.88 standard deviation so it was significant to the .001 level that there was a significant difference between the G.P.A.'s of female handicapped college students and female college students in general, so the null hypothesis had to be rejected. Therefore, since the female college students in general had a significantly higher G.P.A. an alternate form of the hypothesis must be stated. Female college students in general make significantly higher G.P.A.'s than do female handicapped college students.

TABLE V

A Comparative Analysis of the G.P.A. of Male College Students in General
and Handicapped Male Students at the University of Georgia, 1965-1966
School Year.

School	Mean of General College Male Students	Number	Mean of Handicapped College Male Students	Number
Arts and Sciences	75.3	809	80.0	20
Business	74.3	362	82.6	3
Journalism	73.6	58	*	
Agriculture	73.9	104	*	
Education	75.0	45	75.2	1
Forestry	74.2	39	77.4	2
<hr/>				
Median	74.25		78.7	
Mean	75.4		79.9	
Number	1417		26	
Range	2.7		7.4	
S. D.	1.05		1.47	

* No handicapped students enrolled in this school

Standard Deviation of Difference	1.07
Mean Difference	4.5
t score	21.03

Hypothesis 3 - There is no significant difference between the grade point average of male handicapped college students and male college students in general.

Table V is designed to prove this statement true or false. It is the comparison of handicapped male college students with male college students in general.

Once again the handicapped group shows a superior average over the general population. The median of handicapped males is 4.45 points higher than the group of general college males, although the range indicated more variability within the handicapped students.

Handicapped males had a mean 4.5 points higher than the general male students. The standard error of difference was found to be 1.07. Since the number of handicapped students was less than thirty, the "Student's" t was used to find the significance of difference between the means. Since the null hypothesis assumes the means of the two groups to be equal, they are considered as such and then proven equal or not equal. The t score was found to be 21.03. This is beyond 2.88 hence it is with assurance at the .002 level on the one-tailed test, that the null hypothesis is rejected. So the handicapped male students G.P.A. is significantly higher than the G.P.A. of male college students in general.

Cannot say

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER STUDY.

Summary

This study attempted to gain a better understanding of handicapped students in college. The basic purpose of the study was: (1) to find out how well handicapped students compare, grade-wise, with the general population of college students, and (2) to report these findings in order that rehabilitation counselors might profit from additional knowledge about handicapped college students.

The data presented in this project report were secured from two sources: (1) final computations made by the computer used by the administration at the University of Georgia, and (2) official grades issued by the university.

The results found by this study show that the rehabilitation counselor does an excellent job of screening handicapped students. It seems that this is an admirable quality and a compliment to the entire Division of Vocational Rehabilitation.

Conclusions

The most striking conclusion to be drawn from this study is the fact that handicapped students were higher in G.P.A. than college students in general. The overall G.P.A. of handicapped students was 79.7 Fall quarter, 79.2 Winter quarter, and 79.6 Spring quarter. College students in general had mean G.P.A.'s of 77.5 Fall quarter, 76.4 Winter quarter, and 76.7 Spring quarter. A comparison of these means shows

that the handicapped students were higher each quarter and for the entire year to the .002 level of significance.

Female handicapped students did not fare as well in comparison as did the entire handicapped population. Female college students in general had a G.P.A. higher than the handicapped females. This difference was significant and to the .005 level when considered on the one-tailed test.

Male handicapped students followed the path set forth by the general handicapped population. The male handicapped were again higher in G.P.A. than the male college students in general.

Considering all handicapped students in this study, it was quite evident that they were grade-wise superior to the ordinary college student. This could be taken as a compliment to the rehabilitation counselors who screened, tested, and evaluated these students. Even though the handicapped girls compared lower with college females in general, it must be remembered that the competition was as keen brought out by the fact that female students in general had a mean G.P.A. 2.7 points higher than male students in general.

Recommendations for Further Study

It is felt that further studies would contribute much toward knowledge of the handicapped college student. These studies could be:

1. A similar study conducted to encompass students in schools representing the entire State of Georgia on a more complete study of students representing the college population of the country.

2. A study of the grades of dropouts and the reasons for dropping out of college.
3. A study of the extra-curricular activities of handicapped college students.
4. A study of the economic circumstances of handicapped college students.
5. A study of the college success of students with different types of handicaps.
6. A study of the actual handicapped students rather than just those sponsored by Vocational Rehabilitation.

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